

# ANNUAL REPORT

OF THE

## COMMITTEE

OF THE

MANCHESTER AND SALFORD

# SANITARY ASSOCIATION,

BEING

Summary of their Proceedings for the Year 1875.

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MANCHESTER:

POWLSON AND SONS, PRINTERS, 26, SOUTH KING STREET.

1876.



# MANCHESTER AND SALFORD SANITARY ASSOCIATION.

## Committee and Officers for the Year 1875.

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The Worshipful the MAYOR of MANCHESTER.

The Worshipful the MAYOR of SALFORD.

The Very Rev. the DEAN of MANCHESTER.

MARQUIS of HARTINGTON.

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Sir E. ARMITAGE.

JOHN CHEETHAM, Esq.

Sir JAS. L. BARDSLEY, M.D.

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### Deputy-Chairman:

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J. THORBURN, M.D.  
G. V. VERNON, ESQ., F.R.A.S., M.B.M.S.  
M. A. EASON WILKINSON, M.D., F.R.C.P.  
T. R. WILKINSON, ESQ.  
G. W. RAYNER WOOD, ESQ.

### Secretary.

Mr. FREDK. SCOTT.

Committee Rooms,

78, Cross Street, Manchester.

# S U B - C O M M I T T E E S .

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## POLLUTION OF AIR.

V. K. ARMITAGE, Esq.	Dr. RANSOME.
Dr. HARDIE.	Professor ROSCOE.
„ HADDON.	Dr. R. ANGUS SMITH.
„ LEECH.	„ SAMELSON.
H. PHILIPS, Esq.	G. W. RAYNER WOOD, Esq.

## PREPARATION OF TRACT ON THE EFFECTS OF ALCOHOL ON THE SYSTEM.

Dr. RANSOME.	Dr. HADDON.
„ MARTIN.	V. K. ARMITAGE, Esq.
„ HARDIE.	

## POLLUTION OF RIVERS.

V. K. ARMITAGE, Esq.	Dr. LEECH.
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## COTTAGE DWELLINGS.

V. K. ARMITAGE, Esq.	J. NEWTON, Esq.
Rev. St. VINCENT BEECHY.	A. G. Mc.BEATH, Esq.
Dr. HARDIE.	Dr. RANSOME.
„ HADDON.	T. WORTHINGTON, Esq.

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*Communications for the Committee may be addressed to—*

Dr. NOBLE, Chairman, Ardwick Green.

Dr. RANSOME, Deputy Chairman, 1, St. Peter's Square.

OLIVER HEYWOOD, Esq., Treasurer, St. Ann's Street.

The Honorary Secretaries, { Dr. HARDIE, King Street.  
                                  Dr. HADDON, Eccles.  
                                  V. K. ARMITAGE, Esq., Eccles.

OR TO

Mr. FREDK. SCOTT, Secretary, 78, Cross Street.

At the ANNUAL MEETING of the Manchester and Salford Sanitary Association, held at the Memorial Hall, Albert Square, on Thursday, June 29th, 1876.

DR. RANSOME IN THE CHAIR.

The Annual Report having been taken as read,

It was moved by Dr. RANSOME; seconded by OCTAVIUS DEAN, Esq.;

That this Meeting cordially approving the proceedings of the Committee, as set forth in their Report, request that the said Report may be printed and extensively circulated.

Moved by THOMAS MELLOR, Esq.; seconded by Mr. Alderman Mc.KERROW;

That inasmuch as infectious disorders are amongst the most fatal and most readily preventible sources of excessive mortality, this Meeting trusts that the Committee will continue their efforts to promote the regular record of those diseases, and will use every means in their power to secure all possible precautions being taken by the Local Authorities to prevent their spread.

Moved by Dr. BRIERLEY; seconded by Dr. HADDON;

That the practical efforts of the Committee to improve the condition of the poorer classes by directing attention to the sanitary laws, deserve the encouragement and pecuniary support of this Meeting and the public in general.

Moved by T. WORTHINGTON, Esq.; seconded by C. ESTCOURT, Esq.;

That the best thanks of this Meeting be given to the President, Vice-Presidents, Committee, and Officers for their unwearied attention in promoting the interests of this Association; and that the following Noblemen and Gentlemen be requested to act for the ensuing year. (For the names see third page.)

ARTHUR RANSOME, Chairman,

The Chair having been taken by Mr. Alderman Mc.KERROW,

It was moved by J. CHADWICK, Esq.; seconded by A. G. Mc.BEATH, Esq.;

That the thanks of the Meeting be given to Dr. RANSOME, for presiding on this occasion, and for the interest he evinces in the welfare of the Association.



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# R E P O R T.

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THE Committee of the Manchester and Salford Sanitary Association have the pleasure of presenting to the subscribers a report of their proceedings during the year 1875.

## POLLUTION OF RIVERS.

This question, which has long occupied the attention of the Committee, was brought prominently before the public by the introduction of a Bill to the House of Lords by Lord Salisbury early in the year. The Committee which has repeatedly urged the necessity for legislation on the subject, carefully considered the provisions of the Bill, and transmitted to Lord Salisbury, in the form of a memorial, the amendments which, to the Committee, appeared desirable. For copy see appendix (A). The Committee regret to state that owing to the interested opposition raised to the Bill it was withdrawn. The Government, however, have promised to bring in another Bill, and your Committee will not fail to take such action in relation to it, as they deem conducive to the interests of the district.

## PUBLIC HEALTH BILL.

The Committee had also under consideration the Public Health Bill of last session, and a petition, suggesting sundry amendments in it, was sent to the House of Lords. For copy see appendix (B).

## PROPOSED SALE OF THE ROYAL INFIRMARY.

The proposal to dispose of the open space in Piccadilly to a company, or other party by whom it

would probably be covered with warehouses, &c., was deemed by the Committee of sufficient importance to justify a remonstrance on the subject being addressed to the City Council, for which see appendix (C).

#### HOSPITAL ACCOMMODATION.

The Committee are much concerned at the continued apathy displayed by the Corporation of Manchester in connection with this most necessary sanitary reform. Notwithstanding the known concurrence of the Medical Officer of Health (Mr. Leigh) with the views of the Committee on this subject, the City Council, although fully empowered to do so, has neglected to adopt the only means by which sanitarians consider it possible to stamp out epidemic disease, and continues to evade the performance of an obvious duty, while hundreds of lives are being annually sacrificed to official inaction. A letter on the subject, addressed to the Council in November last, contains a *résumé* of the action of the Association in the matter.--(See appendix D.)

The Committee note with pleasure that the Salford Corporation are, at the time of writing this report, preparing, at a considerable outlay, a building in Cross Lane for the isolation of infectious diseases.

#### NOXIOUS VAPOURS.

At the invitation of the Lancashire and Cheshire Association for Controlling the Escape of Noxious Vapours and Fluids from Manufactories, the Association was represented at a Conference at Warrington, when a Petition to Parliament was adopted, praying for improved legislation as to the escape of Noxious Vapours from Chemical and other Works. The Sub-

Committee of the Association on this subject, whose report on the Smoke Nuisance appeared last year, has continued its work. The publication of that report seems to have had a salutary effect inasmuch as the Nuisance Inspectors have since displayed more discrimination in distinguishing between "dense black" and "moderate" smoke as indicated by the increased number of prosecutions that have taken place. It is obvious, however, even to a casual observer that there is still great room for improvement as regards this nuisance. The Sub-Committee having invited the co-operation of the North-Western Association of Medical Officers of Health in their inquiry, as to the Effects of Noxious Vapours from Chemical and other Works upon Human Life, that body readily complied with their request, and furnished the Association with a most interesting and valuable report, which will soon be published.

#### WINTER LECTURES.

As in former years, popular lectures have been delivered with the view of diffusing a knowledge of the laws of health amongst the people. The following is a list of the lectures delivered during the past season :—

"On Causes Reducing the Effects of Sanitary Reform." Memorial Hall. By DANIEL NOBLE, M.A., M.D., F.R.C.P.

"Health, and How to Preserve it." St. Alban's School, Ancoats. By JOHN HADDON, M.A., M.D., Edin.

Do. do. St. Bartholomew's School, Salford, by do.

"Seeds of Disease." Cathedral School, Todd Street. By ARTHUR RANSOME, M.A., M.D.

"How to make Homes Healthy." St. Wilfred's School, Hulme. By ROBERT MARTIN, M.D.

"**The Skin in Health and Disease.**" St. Andrew's School, Ancoats.  
By W<sup>m</sup>. J. SINCLAIR, M.A., M.D.

With a view to increasing the usefulness of these lectures the Committee tried the experiment of publishing the first three of the series and the result has been most gratifying. About 3000 copies have been disposed of chiefly by sale at one penny each. This charge does not recoup the Association for the outlay, but the difference which, in the ordinary course, would have been laid out in connection with the delivery of about half a dozen lectures, is well expended, inasmuch as the number of copies circulated represents the delivery of about forty lectures orally, and being in a permanent form they are well calculated to have a most beneficial effect. Besides these printed lectures the tracts on Typhoid, and Scarlet Fever; Vaccination, Personal Cleanliness, Clothing, Houses, Facts about Health, The Structure of the Body; and the Feeding, Clothing, and Nursing of Children have been judiciously distributed to a large extent.

#### HEALTH OF MANCHESTER AND SALFORD.

The returns of disease in public practice which are now the only statistics of the kind published in the kingdom have been contributed weekly to the daily papers with uninterrupted regularity. The value of these returns in indicating the state of the public health has been forcibly illustrated since the commencement of the epidemic of Small Pox in December last. They have attracted the attention of sanitarians throughout the kingdom, and an attempt is now being made to obtain similar statistics in the Metropolis. The following is a list of the medical men who contribute the

returns, and to whom the thanks of the Association and the public are due for their disinterested services:—

R. M. Mann, Esq., St. Peter's Poor Law District, Manchester.		
Edwd. Meacham, Esq., St. George's	do.	do.
T. Price, Esq., Cathedral	do.	do.
O. Dean, Esq., St. Jude's	do.	do.
J. Westmorland, Esq., St. Michael's	do.	do.
W. Needham, Esq., Resident Med. Officer, Manchr. Work. Hospt.		
G. R. Gowland, Esq.,	do.	Crumpsall do.
H. Tomkins, Esq.,	do.	Monsall Hospital.
H. M. Lightoller, Esq., House Physician, Royal Infirmary.		
H. Runcorn, Esq., House Surgeon, St. Mary's Hospital.		
Wm. Bourke, Esq.,	do.	Clinical do.
H. M. Powell, Esq., Visiting Medical Officer, Children's Hospital.		
A. Boutflower, Esq., Medical Officer, City Gaol Hospital.		
Dr. J. C. Peatson, Surgeon, Lock Hospital.		
Dr. A. C. Clarke, Greengate Poor Law District, Salford.		
Dr. T. M. Johnson, Regent Road	do.	do.
J. N. Cooper, Esq., House Surgeon, Pendleton Dispensary.		
J. S. Orchard, Esq., Medical Officer, Salford Workhouse.		
J. H. Morris, Esq., House Surgeon, Salford Hospital.		
Dr. C. H. Braddon, Med. Officer County Prison Hos., Strangeways.		
S. Woodcock, Esq., St. George's Poor Law District, Hulme.		
Dr. A. Wilson, Medlock	do.	do.
H. M. Williamson, Esq., St. Philip's	do.	do.
Dr. A. Emrys-Jones, House Surgeon, Hulme Dispensary.		
Joseph Foster, Esq., Poor Law District, Chorlton.		
Dr. George Rice, Medical Officer, Union Workhouse, Withington.		
S. F. Mc.Lachlan, Esq., House Surgeon, Chorlton Dispensary.		
R. T. Parkinson, Esq., House Surgeon, Southern Hospital, C-on-M.		
Dr. J. Watson, Medical Officer, Poor Law District, Ardwick.		
J. Leigh, Esq., M.R.C.S., Medical Officer of Health, Manchester.		
Dr. J. Tatham, Medical Officer of Health, Salford.		

The following is a quarterly summary of the new cases of disease treated in public practice in 1875, compiled from the returns:—

*Quarterly Returns of New Cases of Disease in public  
practice in Manchester and Salford in the year 1875.*

DISEASES.	March	June.	Sept.	Dec.	Total.	Corresponding Totals for 1-74.
Small Pox ....	22	52	60	170	304	98
Measles .....	327	394	179	108	1,008	795
Scarlet Fever ..	101	98	144	154	497	777
Diphtheria ....	8	2	3	1	14	20
Whooping C'gh.	360	427	506	422	1,715	1,315
Croup .....	14	18	7	3	42	30
Diarrhoea.....	434	563	1,645	615	3,257	3,970
Dysentery ....	1	3	5	1	1	32
Malignant Chol.	—	—	—	—	—	—
Erysipelas ....	154	140	118	127	539	602
Continued Fever	39	55	53	43	190	253
Typhus .....	17	7	12	32	68	70
Typhoid .....	80	42	71	65	258	350
Febricula ....	492	481	367	366	1,706	1,932
Ague .....	—	3	2	—	5	7
Rheumatic Fever	232	183	163	258	836	676
Puerperal Fever	?	9	2	2	16	13
Bronch., Catarrh	4,373	3,168	1,774	2,892	12,207	12,194
Influenza.....	55	30	8	37	130	139
Pleurisy and } Pneumonia }	440	422	278	317	1,457	1,186
Phthisis .....	994	911	683	619	3,207	3,159
Const. Syphilis	803	822	922	955	3,502	3,075
Other diseases..	11,437	11,400	10,519	9,050	42,400	45,826
Accidents ....	3,346	4,075	4,202	3,531	15,154	13,773
Total .....	23,732	23,305	21,723	19,771	88,531	90,292
Deaths in Public Practice ....	1,078	870	681	749	3,378	3,178

The health of Manchester and Salford in 1875 as compared with previous years has not been satisfactory. Although there was a decrease of 1761 in the total number of cases under treatment in the various institutions from which returns are received, this improvement is only apparent inasmuch as a considerable number of the patients who formerly were admitted to the charitable institutions have been transferred to the Provident Dispensaries. The fact of sickness having been far more prevalent in the past year than in 1874 is attested by the death returns of the Officers of Health, as shown in the following table:—

*Quarterly Returns of Deaths and Births in Manchester and Salford in the year 1875.*

DISEASES.	March.	June	Sept.	Dec.	Total.	Corresponding Total s for 1874
Small Pox .....	2	5	8	24	39	13
Measles .....	78	110	82	68	338	320
Whooping C'gh.	111	102	86	129	428	412
Scarlatina .....	106	77	128	250	561	628
Fever .....	74	40	76	90	280	285
Diarrhœa .....	51	65	518	142	776	922
Dis. of Lungs..	1,519	958	583	884	3,944	3,407
Other causes ..	1,982	1,677	1,629	1,737	7,025	6,838
Total Deaths ..	3,923	3,034	3,110	3,324	13,391	....
Correspondg. No. last year {	3,196	2,962	3,342	3,325	..	12,825
Deaths under 5 years.... {	1,568	1,358	1,801	1,655	6,382	6,419
Average death rate .....	35.1	29.2	28.3	30.4	30.7	28.5
Births .....	5,062	4,951	5,083	4,776	19,872	19,501

From these figures it will be seen that the mortality from Scarlatina, Fever and Diarrhœa in 1875 as compared with 1874 decreased by 67, 5, and 146 deaths respectively, while 26 *more* succumbed to Small Pox, 18 to Measles, 16 to Whooping-Cough, 537 to Diseases of the Lungs, and 187 to other causes, making a net increase of 566 deaths. The deaths under five years show a decrease of 37, but the number of infantile deaths is nevertheless much too large. Measles, Scarlatina, and Whooping-Cough—essentially diseases of childhood—alone caused 1327 deaths in the past year. It is deplorable to observe the indifference of the Corporate Authorities to these startling facts, and considering the efforts of this Association to arouse the City Council to a sense of its duty, as stated in (D) in the Appendix, it can scarcely be too much to say that the Manchester City Council, empowered as it is to provide the means of saving a large proportion of those lives, and failing therein incurs great moral responsibility. Notwithstanding all the sanitary improvements effected, since the formation of the Health Committee in 1868, under the able direction of Mr. Leigh, some of the more serious Epidemic Diseases, as Small Pox and Measles, have not only not been kept in check but have actually been more fatal. This is shown by the following table which gives the averages of the deaths from zymotic diseases in the five years ending 1870, and five years ending 1875.

Deaths from Zymotic Diseases, in Manchester and Salford, for ten years ending 1875.

DISEASES.	1866	1867	1868	1869	1870	Average for 5 years	1871	1872	1873	1874	1875	Average for 5 years
	36	7	13	70	76	40	456	104	22	13	39	126
Small Pox.....	218	338	279	427	72	266	408	124	572	320	338	352
Measles.....	360	554	1,510	655	349	685	314	420	639	628	561	512
Scarlatina.....	489	478	316	283	505	414	318	626	189	412	428	394
Whooping-Cough .....	1,061	641	930	552	505	737	380	328	315	285	280	317
Total of Zymotic Diseases	2,164	2,018	3,048	1,987	1,507	2,144	1,876	1,602	1,737	1,658	1,646	1,703
Total of all Diseases .....	13,989	13,763	14,474	12,761	12,816	13,560	14,184	12,846	13,666	12,825	13,391	13,382

Average Population, taken from the Official Census, (Municipal} .... 1866-70..... 447,824.  
 .... 1871-75..... 485,498.

Of the five diseases named in this table, "Fever," which includes Typhoid, Typhus, &c., is the only one that shows a marked decrease, and from the returns of the Registrar General it would appear that this decrease is general throughout the kingdom. Safety from the other diseases cannot be effectually secured without the increased hospital accommodation already indicated. These observations apply specially to Manchester, as the Children's Hospital at Pendlebury to some extent meets the wants of Salford. Still there is room for improvement, even there, inasmuch as a much larger proportion of infected children could be isolated if there was an hospital in the Borough.

#### METEOROLOGY.

As was anticipated in the last annual report the Committee have, by the kindness of Mr. Mackereth, been enabled to obtain, in a diagrammatic form, a chart of:—

- (1) Mean height of Barometer in Inches at Sea Level.
- (2) Amount of changes in atmospheric pressure in 10ths of an Inch.
- (3) Mean Temperature for 16 years in deg. Fahr.
- (4) Mean Temperature of the year 1875.
- (5) Amount of changes of Temperature in deg. Fahr.
- (6) Rainfall in Inches.
- (7) Mean Direction of the Wind.
- (8) Amount of Horizontal Movement of the Wind in Miles.
- (9) Mean Amount of Ozone, in Scale from 0 to 10.

By the assistance of this chart and the diagrams of diseases,\* we are, in some measure, able to detect

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\* The diagrams are not published this year owing to the want of funds, but they, along with the Meteorological Chart, may be consulted at the Office by any one interested in the subject.

any relation which may exist between the outbreak of a disease and the state of the weather. Hitherto those who have considered the effect of the weather on health, have taken the number of deaths as an index of the disease in a district; but it is evident that results obtained in such a way, cannot be relied upon as strictly accurate. Thus if a particular disease, say Measles, depends on atmospheric conditions for its cause, the conditions which produced it may have entirely passed away before any deaths take place; and consequently any inferences drawn from such observations must be misleading. It is only by having a system of registering cases of sickness that we can hope to determine the relation which exists between particular states of the weather and disease. There are difficulties, however, even when we do possess a register of new cases of disease, seeing that some do not come under observation until they have existed for a longer or shorter time; and it is too much to hope that the general body of the medical profession will take such an interest in this subject as to undertake the amount of work necessary to obtain a register of cases which would furnish us with a diagram, perfectly accurate, and strictly comparable with those on the Meteorological Chart.

This is not the first year in which we have been able to compare the meteorology with the outbreak of disease in Manchester and Salford, since the first numbers of the Association's weekly "Health Reports" contain conclusions, drawn from meteorological data supplied to the Committee, and in several subsequent

publications\* contributions to the existing stock of knowledge on the subject were made. Still many years must pass and many charts must be compared before we can be said to possess certain information as to the effects of the different states of the weather on health.

From the diagrams we possess we shall note a few facts which are of interest, and which may serve to indicate what advances may be made in our knowledge as to the causation of disease by the study of meteorology. It is interesting to observe how closely they bear out the conclusions that were drawn in the earlier publications of the Association.

i. Our diagram of Diarrhœa and Dysentery is one of the most definite, having only one rise and that in the hot months of the year.

In 1874 the highest point was reached during the last week in August, while in 1875 the highest point was in the first week in September. On examining the meteorology of those years we find that the maximum temperature was reached in 1874 in July, and that it gradually declined into September, while in 1875 the maximum occurred in August and it gradually declined through September. That is, in 1874 the maximum temperature occurred a month sooner than it did in 1875, and declined at the same time in both years; and corresponding exactly with that,

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\* "Analysis of the Weekly Returns of Health and Meteorology of Manchester, from September 8th, 1860, to December 28th, 1861." By Arthur Ransome, M.B., M.A., Cantab., M.R.C.S.; and G. V. Vernon, F.R.A.S., M.B.M.S.

"Disease in St. Marylebone and Manchester, 1860-65." By Arthur Ransome, M.B., M.A., Cantab., M.R.C.S.

"On Epidemics, studied by means of Statistics of Disease." By Arthur Ransome, M.A., M.B., Cantab., M.R.C.S. &c. &c.

the maximum of cases of Dysentery and Diarrhœa, occurred a month earlier in 1874 than it did in 1875, and yet the number of cases began to diminish in both years at the same time. We may thus conclude that whatever else may influence the occurrence of Diarrhœa and Dysentery, the number of cases varies directly with the height of the thermometer.

2. MEASLES.—From a study of the attacks of Measles in 1875 in connection with the Meteorological Chart we find that this disease occurred when (1) the rainfall was low, (2) when there was little wind and that from the west, and (3) when the temperature was low.

Measles, then would seem to vary with the rainfall, being essentially a disease of droughty weather.

3. SCARLATINA.—During 1875, the number of cases of Scarlatina was greatest in the end of July and beginning of August, and on examining the state of the weather at the same time we find that there was (1) a low temperature, (2) heavy rain, (3) a north wind, (4) very little movement of wind, and (5) very little ozone.

Scarlet Fever then apparently coexisted with wet as Measles did with dry weather.

4. WHOOPING COUGH.—In correspondence with the greatest number of cases of this disease we find (1) great amount of change of barometer, (2) north and east winds.

5. RHEUMATIC FEVER.—The greatest number of cases occurred in December, and we find that they followed (1) great changes in the barometer, (2) a low temperature, (3) little rainfall, (4) a north wind.

We have diagrams of other diseases but these five seem most markedly to point to some steady dependence on atmospheric influence, and may serve to point out the importance of the enquiry in which, as a Sanitary Association, it is our earnest desire to assist.

#### MISCELLANEOUS.

Amongst other subjects which have been under the consideration of the Committee are the operation of the Artizans' Dwellings Act in Manchester, and the Adulteration of Food Act. A Sub-Committee on the former is now actively engaged. Several inquiries were made during the year to ascertain the extent to which the adulteration of milk is carried on. The analyses in many instances showed that adulteration had been practised or that the cream had been removed, and the result of the inquiries being made known caused an immediate improvement in the quality of the milk in the respective neighbourhoods. The Committee of this Association would repeat what they have before pointed out, viz: that the law for preventing adulteration cannot be effectually administered until inspectors are appointed to act under the City Analyst in systematically obtaining specimens of food, &c., for analysis.

The Committee desire to record their appreciation of the courtesy they have experienced from the Municipal and Governmental Departments with which they have been in communication during the year.

The following newspapers are supplied gratis to the Association, viz:—“The Sanitary Record,” “The British Architect and Northern Engineer,” and “The Medical Examiner.” The Association exchanges pub-

lications with all the other learned societies of Manchester and several throughout the kingdom.

The Committee regret to have again to remark that their operations in the interest of the public health are greatly curtailed for want of funds. The new and important work undertaken in publishing the lectures involves a considerable outlay, and the Committee would urgently appeal to those who can afford it, to give them their pecuniary support.

## APPENDIX.

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(A)

### THE POLLUTION OF RIVERS.

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*To the Most Noble the Marquis of Salisbury. &c., &c., &c., Her Majesty's Principal Secretary of State for India.*

The Memorial of the Manchester and Salford  
Sanitary Association

RESPECTFULLY SHEWETH,

That your memorialists, who are a body of professional men, and others associated for the purpose of ameliorating the conditions adverse to public health in Manchester and Salford, and for promoting sanitary reform generally, have long taken a deep interest in the question of the pollution of rivers, and have, from time to time, urged in the proper quarters the necessity for abating the nuisances caused by the polluted streams in this district, in which they are more immediately interested.

That they have accordingly hailed with much satisfaction the introduction by your Lordship into the House of Lords of a "Bill for Amending the Law relating to the Pollution of Rivers."

That your memorialists, while approving generally of the bill in question, are of opinion that some of its provisions might be made more stringent without imposing undue hardship on manufacturers, local authorities, or other persons interested. Your memorialists would, therefore, respectfully submit for your Lordship's consideration the following suggestions for the amendment of the Pollution of Rivers Bill in Committee, viz:—

**CLAUSE 2.**—That the prohibition as to putting solid matter into streams be made absolute.

**CLAUSE 3.**—That the prohibition as to the drainage of solid or liquid sewage matter into streams be made absolute also; time, say five years from the passing of the Act being allowed for necessary alterations, to persons who had thus polluted any stream previous to January 1st, 1875.

**PROVISOES TO CLAUSES 4 and 5.**—That a clause be inserted prohibiting the examination of expert witnesses by the parties to litigation under the Act, and giving the County Court Judges power to appoint one or more scientific assessors, in cases in which such evidence is required, to report to them whether the best practicable and available means “to detain or render harmless the poisonous, noxious, or polluting liquid” have been used.

**CLAUSE 6.**—That manufacturers who avail themselves of the facilities to be afforded by local authorities for passing their polluted water into the sewers be made responsible for the temperature of such water not exceeding 80 degrees.

Your memorialists, therefore, earnestly pray that the foregoing suggestions may receive your Lordship’s careful consideration, with a view to their being adopted, as far as practicable, by your Lordship in framing any amendments to the Pollution of Rivers Bill in Committee.

And your memorialists will ever pray, &c.

Signed on behalf of the Manchester and Salford

Sanitary Association,

DANIEL NOBLE, M.A., M.D., Chairman.

ARTHUR RANSOME, M.A., M.D., Deputy Chairman.

JAMES HARDIE, M.D.,

JOHN HADDON, M.A., M.D., } Hon. Secs.

V. K. ARMITAGE, M.A., LL.B., }

(B)

## PUBLIC HEALTH BILL.

*To the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland in Parliament assembled.*

The Humble Petition of the Manchester and Salford Sanitary Association

SHEWETH,

That your petitioners are a body consisting of Medical Men, Clergymen, Lawyers, Engineers, Merchants, and others, associated for the purpose of promoting the interests of the public health.

That they have for many years devoted much attention to the subject of infectious diseases, the precautions which should be taken to prevent them spreading, and the advancement of medical science by their systematic registration.

That it is computed that upwards of 100,000 persons die annually in England and Wales from these diseases.

That the majority of persons affected by them belong to the poorer classes of the population, whose sufferings are increased and the chances of whose recovery are diminished by their poverty.

That your memorialists are convinced that if known precautions were taken to prevent the communication of infection, much disease, death, suffering, and loss would be prevented.

That owing to the ignorance which prevails amongst the people respecting sanitary matters these precautions are not generally adopted, and consequently the people can only be properly protected against the ravages of the diseases in question by requiring precautions against their spreading to be taken in all cases under the supervision of the local sanitary authorities.

That your petitioners are of opinion that neither the existing statutes nor the Public Health Bill, now before your

Right Honourable House, contain adequate provisions relating to infectious diseases.

That your petitioners, therefore, pray your Right Honourable House to insert clauses in the Public Health Bill, specifying certain fevers and other infectious diseases which shall be within the provisions of the Act, and providing:—

- 1.—That all such cases of fever or any other infectious diseases within the Act, shall be speedily brought under the notice of the sanitary authority having jurisdiction over the area in which they occur.
- 2.—That in order that this may be done, medical men attending such cases shall be bound to give immediate notice thereof to such local sanitary authority.
- 3.—That they shall also be bound to declare their infectious character to the persons in charge of the houses in which they occur, so that some immediate precautions may be taken to prevent them from spreading.
- 4.—That when no medical man is in attendance, such persons in charge shall themselves give the required notice to the local sanitary authority.
- 5.—That every local sanitary authority receiving such a notice shall immediately send printed directions as to the disinfection of clothing, &c., and as to precautions which shall be taken to prevent the spread of infectious diseases, to the person in charge of the house where such infectious disease is.
- 6.—That these directions shall include various methods of disinfection, some of which shall be capable of being adopted by persons in the poorest circumstances, that they shall be drawn up and printed under the supervision of the Medical Officers of the Local Government Board, and that every local sanitary authority shall be bound to keep a stock of them ready for immediate use.

- 7.—That at intervals of not more than ten days, counting from the receipt of these directions, such persons in charge shall send to such local sanitary authority the certificate of a duly qualified medical man that the directions have been properly acted upon.
- 8.—That he shall continue to do this until he send to such authority the certificate of a duly qualified medical man that no person in the house under his charge is ill of fever or any other infectious disease within the Act, and that those parts of it requiring disinfection, together with the bedding and clothing used by and about the person who was sick, have been thoroughly cleansed and disinfected.
- 9.—That medical men wilfully neglecting to give notice and to declare as under the circumstances above mentioned; medical men or other persons giving false certificates; and persons in charge of houses having cases of fever or any other infectious disease within the Act in them, wilfully neglecting to give the required notice when no medical man is in attendance, or to act upon the printed directions sent to them, shall be liable to be fined.
- 10.—That the persons last mentioned on being guilty of any of these defaults, or on failing to send the periodical certificates in question, shall also be liable to have their houses entered by the officers of the local sanitary authority having jurisdiction over the area in which they are situated, who shall have the power to do the cleansing and disinfecting required, to remove the infected persons to a hospital, if necessary, and to charge the cost of such proceedings to the defaulters.
- 11.—That every local sanitary authority shall make monthly returns to the Local Government Board of all cases of fever or other infectious disease within the Act of which they receive notice as above-mentioned.

Your petitioners humbly pray that your Right Honourable House will embody in the Public Health Act the above-mentioned amendments.

And your petitioners will ever pray, &c.

Signed on behalf of the Manchester and Salford  
Sanitary Association,

DANIEL NOBLE, M.A., M.D., Chairman.

ARTHUR RANSOME, M.D., M.A., Deputy Chairman.

JAMES HARDIE, M.D.,

JOHN HADDON, M.A., M.D.,

V. K. ARMITAGE, M.A., LL.B.,

Hon. Secs.

78, Cross Street, Manchester, July 5th, 1875.

(C)

### PROPOSED SALE OF THE INFIRMARY SITE.

*To the Worshipful the Mayor, Aldermen, and Councillors of the City of Manchester.*

The Memorial of the Manchester and Salford  
Sanitary Association

RESPECTFULLY SHEWETH,

That the Committee of this Association have noted with much interest the discussion which took place at the last Meeting of the City Council, with reference to the proposed sale of the Manchester Royal Infirmary.

That it is a fact, fully recognized by all sanitarians, that open spaces in the midst of large masses of population are essential for the proper diffusion and renewal of the air surrounding their dwellings, and consequently for the maintenance of the health of the people; and the City of Manchester being singularly poor in the possession of such ventilating spaces, while its atmosphere is at the same time vitiated to an exceptionally large extent by smoke and noxious gases, this Committee would deplore the covering of the Infirmary gardens as a distinct and grievous loss to the well being of the community.

That they, therefore, beg respectfully, but strongly, to support the opinions of some members of the Council, that the

Corporation should take steps to preserve the vacant land surrounding the Infirmary from being covered by buildings, and they would express the earnest hope that the Corporation, as the Sanitary Authority of the City, will, in pursuance of its enlightened policy of street improvements, interpose to prevent such a retrograde step being taken, and find means of preserving intact the Infirmary grounds, in the event of their passing out of the hands of the present owners.

And your memorialists will ever pray, &c.

Signed on behalf of the Manchester and Salford  
Sanitary Association,

DANIEL NOBLE, M.A., M.D., Chairman.

ARTHUR RANSOME, M.D., M.A., Deputy Chairman.

JAMES HARDIE, M.D.,

JOHN HADDON, M.A., M.D.,

V. K. ARMITAGE, M.A., LL.B.,

} Hon. Secs.

78, Cross Street, Manchester, September 28th, 1875.

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( D )

## HOSPITAL ACCOMMODATION.

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*Manchester and Salford Sanitary Association,*

*78, Cross Street,*

*Manchester, November 17th, 1875.*

SIR,

On October 26th, 1874, a memorial was addressed by this Association to the City Council, praying for the provision and maintenance, out of the rates, of small hospitals for the isolation of infectious diseases in various parts of the City.

In the reply received through you it was stated that a Special Committee had been appointed to consider the subject. A year having now elapsed without any result of the deliberations of that Committee being made known, we are desired by our Committee to ask whether any steps have been taken towards giving effect to the views which they hold in common with the Medical Officer of Health (Mr. Leigh).

They feel that a question of so much importance, and which has been brought before the Council so often by the Association, should, before now, have passed the stage of consideration. In 1865 a memorial was presented to the Council urging house to house visitation, the removal of infectiously diseased persons to hospital, and the extension of hospital accommodation. In 1868 a Committee, appointed at a public meeting convened by the Mayor on the requisition of the Association, reported that the accommodation for cases amongst the independent poor was totally inadequate. In 1871 the Association again pressed for speedy and energetic action in providing the required accommodation. Nothing having been done, in 1872 the question was brought before the public on behalf of the Association by a member of the Committee, in a paper on "The Duty of Municipal Authorities to provide Hospital Accommodation for Infectious diseases;" and the continued inaction of the authorities called forth the memorial of last year already referred to.

Notwithstanding all the structural sanitary improvements effected by the Corporation, the more serious infectious diseases are still endemic in the City, and the Committee of the Sanitary Association would, therefore, again earnestly urge the Corporation to provide, without further delay, such hospital accommodation as has been from time to time indicated by the Association, as necessary for the protection of the inhabitants of Manchester.

We have to request that you will kindly lay this communication before the Council at their next meeting.

We are Sir,

Yours faithfully,

(Signed) JAMES HARDIE, M.A., M.D.,  
 JOHN HADDON, M.A., M.D., } Hon. Secs.  
 V. K. ARMITAGE, M.A., LL.B.,

To SIR JOSEPH HERON,  
*Town Clerk, Manchester.*

*The Treasurer in Account with the Manchester and Salford Sanitary Association.*

Dr.

JANUARY 1ST TO DECEMBER 31ST, 1875.

£.  
Cr.

1875.	£ s. d.	£ s. d.	1875.	£ s. d.	£ s. d.
Jan. 31. By Balance in Bank .....	44 19 3		Dec. 31. To Secretary's Salary.....	50 0 0	
Do. in hand.....	1 0 1		Collector's Commission.....	8 19 5	
,, Subscriptions .....		45 19 4	,, Rent and Taxes.....	30 6 9	
Dec. 31. , Subscriptions .....		184 2 6	,, Expenses of Lectures .....	5 7 2	
,, Donations .....	3 1 0		,, Printing and Engraving.....	56 2 10	
,, Publications sold.....	2 2 11		,, Advertising and Stationery.....	11 13 4	
,, Bank Interest .....	0 11 6		,, Coal, Gas, &c.....	2 0 11	
			,, Office Cleaning .....	4 0 6	
			,, Postages .....	12 14 6	
			,, Boy's Wages .....	11 15 0	
			,, Sundries .....	4 11 1	
			,, Balance in Bank .....	28 5 6	
			,, Do. in hand .....	10 0 3	
					38 5 9
					<u>£235 17 3</u>

Examined and found correct,  
JOHN CHADWICK, AUDITOR.

ASSETS AND LIABILITIES.

1876.

Jan. 1—To Balance in Bank, &c., as above .....	38 5 9	1876.	£ s. d.
,, Tracts sold .....	0 12 6	Jan. 1—By Printing .....	32 10 3
,, Balance (deficiency) .....	10 12 4	,, Rent .....	6 5 0

,, Expenses of Lectures .....		,, Advertising .....	5 5 0
,, Sundries .....		,, Sundries .....	3 12 0
			1 18 4
			<u>£49 10 7</u>

## Donations in former Years.

---

	£	s.	d.
Armistead William Esq., M.B.....	10	0	0
Atherton Miss .....	50	0	0
A Friend, per Dr. Morgan .....	50	0	0
A Friend, per T. Turner, Esq.....	10	0	0
Barbour Robert, Esq. ....	10	0	0
Bazley T. Sebastian, Esq., Little Grove, East Barnet, Herts.	5	5	0
Binyon Miss, (Clifton).....	5	0	0
Brooks Samuel, Esq.....	50	0	0
Callender W. R. Senior, Esq.....	5	0	0
Ditto      ditto      second donation.....	5	0	0
Chadwick R., Esq.....	20	0	0
Cheetham John, Esq., Stalybridge .....	5	0	0
Coultate E., Esq. ....	5	0	0
Ellesmere, The Earl of .....	5	0	0
Gardner Robert, Esq. ....	5	5	0
Geldart Mrs. C., Cambridge .....	5	0	0
Gillibrand P., Esq. ....	5	0	0
Heywood E. S., Esq.....	20	0	0
Heywood Oliver, Esq.....	15	0	0
Heywood James, Esq .....	5	5	0
Heywood Sir B., Bart.....	5	5	0
Heywood Arthur H., Esq. ....	5	0	0
Houldsworth Henry, Esq. ....	10	0	0
Jones R., Jennings, Esq.....	5	0	0
Jones W. C., Esq.....	5	0	0
Manchester, the late Lord Bishop of .....	10	0	0
Mackintosh Messrs. C., and Co.....	5	5	0
Philips H. Esq., Manchester .....	5	0	0
Plant James, Esq.....	5	0	0
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Spafford George, Esq.....	5	5	0
Schunk, Souchay, and Co., Messrs. ....	5	0	0
Taylor J. E., Esq.....	5	5	0

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Watkin W. B., Esq. ....	10 0 0
Wood W. Rayner, Esq. ....	5 0 0
Wood G. W. Rayner Esq., Singleton ....	5 5 0

## DONATIONS IN 1875.

	£ s. d.
A Friend.....	1 0 0
Bickham Spencer, Esq., Bowdon .....	1 0 0
Taylor, Kirkham and Co., Messrs., Manchester.....	1 1 0

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	£ s. d.
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Galloway Messrs. W. and J., Chester-road, Hulme .....	2	2	0
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Grafton F. W., Esq., Portland-street .....	2	2	0
Greg, Brothers, and Co., Messrs., Booth-street.....	2	2	0
Greg Francis, Esq., Booth-street .....	2	2	0
Gaddum and Co., Messrs., South-street.....	1	1	0
Galloway Messrs. J., and Co., 7, Mosley-street.....	1	1	0
Gaskell Rev. William, 46, Plymouth-grove .....	1	1	0
Gibson Rev. Canon, Polygon, Ardwick .....	1	1	0
Goldschmidt Philip, Esq., Albert-square.....	1	1	0
Graham Messrs. William, and Co., 86, Major-street .....	1	1	0
Graham William Esq., 18, Aytoun-street.... .....	1	1	0
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Helni S. L, Esq., Grove House, Lincoln Grove.....	1	1	0
Heywood Rev. H. R., Swinton.....	1	1	0
Higgin W. H., Esq., Q.C. Prestwich.....	1	1	0
Hadfield George, Junr., Esq., 32, Fountain-street .....	0	10	6
Heyman H. S., Esq., Hall-street, Oxford-street.....	0	10	0
Herod Mr. M., 1, Friday-street.....	0	2	6
 Ireland Messrs. Alexander, and Co., Pall Mall .....	 1	 1	 0
 Jackson Messrs. E. and J., Portland-street.....	 1	 1	 0
Jackson J. W., Esq., L. and Y. Engineer's Office, Hunt's Bank	1	0	0
Joule Dr., Lower Broughton .....	0	10	6
 Kershaw, Sidebottom, and Co., Messrs., Portland-street.....	 1	 1	 0
Kirkman W. W. Esq., Solicitor, John Dalton-street .....	1	1	0
Kolp and Co., Messrs., George-street .....	1	1	0
Kessler William, Esq., 33, Dale-street.....	1	0	0
 Langton Wm., Esq., M'chester and Salford Bank, Mosley-st. 2 2 0	 2	 2	 0
Lee Messrs. Daniel, and Co., Fountain-street .....	2	2	0
Leisler John, Esq.. Messrs. Du Fay and Co., Booth-street... 2 2 0	2	2	0
Langworthy, Brothers, and Co., Messrs., Charlotte-street... 1 1 0	1	1	0
Lamb James, Esq., John Dalton-street .....	1	1	0
Leech Dr., 96, Mosley-street .....	1	1	0
Lun l Edward, Esq., St. John-street, Deansgate .....	1	1	0
Lyon, Lord, and Co., Messrs., David-street .....	1	1	0
 Macintosh Messrs. Charles, and Co., Cambridge-street .....	 2	 2	 0
M'Connel W., Esq., Henry-street, Ancoats.....	2	2	0
M'Laren Messrs. James, and Nephew, 18, George-street ... 2 2 0	2	2	0
Munn Messrs. John, and Co., 52, Fountain-street.....	2	2	0
Makin Messrs. J., and Son, 17, Mosley-street .....	1	1	0
Manchester, the Right Rev. Lord Bishop of .....	1	1	0
Mellor Thomas, Esq., 204, Clairville, Oxford-street.....	1	1	0
M'Clure Messrs. John, and Son, Cross-street.....	1	1	0
M'Niven Charles, Esq., Godston, Surrey.....	1	1	0
Martin Dr., Embden-street, Hulme.....	0	10	6
Morell J. C., Leyland, near Preston.....	0	10	0

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Newton John, Esq., Carlton-buildings, Cooper-street .....	1	1	0
Nield Alfred, Esq., Parker-street .....	1	1	0
Noble Dr., 32, Ardwick Green .....	1	1	0
 Oxley Edwin, Esq., 43, Port-street. ....	 0	 10	 0
 Philips Herbert, Esq., Church-street. ....	 3	 0	 0
Peel, Messrs. John, and Co., 11, Peel-street, Duke-street ...	2	2	0
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Pearce, Dickinson, and Co., Bale-street, Lower Mosley-st. ....	1	1	0
Peatson, Dr. J. C., Mount-street.....	1	1	0
Potter Messrs, Edmund, and Co., 10, Charlotte-street.....	1	1	0
Prescott C. J. C., Esq., Charlotte-street.....	1	1	0
Parlane James, Esq., Victoria Park .....	1	1	0
Potters and Martin, Messrs., George-street. ....	1	1	0
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Ransome Dr. Arthur, Bowdon.....	1	1	0
Ross Edward, Esq., London-road Station. ....	1	1	0
Ross Malcolm, and Co., Messrs., Cromford-court. ....	1	1	0
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Roscoe Professor, Owens College .....	1	0	0
Rodger George and Son, Messrs., Chorlton-street.....	1	0	0
Rice J., Esq., Consolidated Bank, Pall Mall. ....	0	5	0
 Sharp, Stewart & Co., Limd., Messrs., Atlas Works, Oxford-st. ....	 2	 2	 0
Slater W., Esq., Princess-street. ....	2	2	0
Strines Printing Co., Messrs., The, George-street.....	2	2	0
Schuster, Fulda, and Co., Messrs., 12, Sackville-street.....	1	1	0
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Stoehr Messrs. E. M. and Co., Deansgate. ....	1	1	0
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Sutcliffe, A. E., Esq., Chorlton Lodge, Stretford-road.....	1	1	0

	£ s. d.
Schloss, D., Esq., Brook-street .....	1 1 0
Simpson, Dr., 3, Oxford-street .....	0 10 6
Stowell, Rev. T. A., M.A., 27, Crescent .....	0 10 6
Taylor, Garnett, and Co., Messrs., Cross-street.....	2 2 0
Turner Wright, Esq., Brindle-heath, Pendleton. ....	1 1 0
Thorburn Dr., 333, Oxford-road.....	0 10 6
Trapp S. Clement, Esq., 88, Mosley-street.....	0 10 0
Vernon, Freemantle, and Co., Messrs., Piccadilly Mills, .....	2 2 0
Whitworth Messrs. B., and Brother, 11, Cross-street .....	2 2 0
Wadkin and King, Messrs., 12, Chepstow-street .....	1 1 0
Warner Thomas, Esq., Bank-street.....	1 1 0
Waters Messrs. J. and E., and Co., 31, Portland-street.....	1 1 0
Watts Sir James, Portland-street.....	1 1 0
Whitehead Dr., 87, Mosley-street.....	1 1 0
Wilkinson, Dr. M. A. E., Greenheys.....	1 1 0
Williams Messrs. L. and E., Upton-street, London-road.....	1 1 0
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